AMENDMENTS TO THE SPECIFICATION

Please replace the paragraphs on page 2, lines 1-8 with the following:

However, in this actuator driving control device, when the motor is actuated (or is ~~stopped,~~ stopped), the output of the electric motor is rapidly changed by ~~ON/OFF operations (turning~~ turning on (and/or turning off) ~~of the~~ the MOS transistors, Tr1 to Tr4, of the H bridge circuit 100. Consequently, there has been a problem that noise is generated by backlash of a gear, and the noise is offensive to ears, because especially in recent years, a sound of an engine has been reduced, and an interior of a car has ~~been becoming~~ become increasingly noiseless.

Please replace the paragraph on page 2, lines 13-20 (numbered lines 14-21) with the following:

In order to achieve above object, ~~an driving~~ a driving control device for an actuator according to the present invention comprises a driving ~~device~~ circuit to drive an actuator having an electric motor and a driving control ~~device~~ circuit to control the rotation of the electric motor by controlling the driving ~~device~~ circuit, and the driving ~~device~~ circuit comprises an H bridge circuit constructed by a switching semiconductor element, and rotates the electric motor in normal and reverse directions by turning on and/or off the switching semiconductor element.

Please replace the paragraphs starting on page 4, line 23 and ending on page 5, line 20 with the following:

As shown in FIG. 1, the intake unit 2 comprises a ~~fun 10~~ fan 10 which is rotated at a predetermined speed by a ~~fun motor~~ fan motor 9. Each outside air or inside air is selectively taken from the outside air intake 5 or the inside air intake 6 by the rotation of the ~~fun 10~~ fan 10, and in accordance with the position of the intake door 7. Moreover, the rotation speed of the ~~fun 10~~ fan 10 is changed by modulation of an applied voltage to ~~the fun~~ the fan motor 9, so that the volume of air to be blown inside a vehicle is adjusted. When the intake door 7 is positioned in A as shown in FIG. 1, an outside air entry (FRE) is adopted, and when the intake door 7 is positioned in B as shown in FIG. 1, an inside air circulation (REC) is adopted.

An evaporator 11 for constructing a refrigeration cycle is installed in the ~~cleaning~~ cooling unit 3. Refrigerant is supplied to the evaporator 11 by activating a compressor (not shown), and the intake air is cooled down by a heat exchange with the refrigerant.

A heat core 12 for circulating engine cooling water is installed in the heater unit 4. An air mix door 13 for adjusting the ratio between the volume of air which is passed through the heat core 12 and the volume of air which ~~is bypassed~~ bypasses the heat core 12 is rotatably disposed in the upstream side of the heat core 12.

The air mix door 13 is rotated by an electric motor type actuator 30A shown in FIG. 2 through ~~a rink~~ a link mechanism (not shown). A mixture ratio between the warm air which is heated by the heat exchange with the engine cooling water after passing through the heat core 12 and unheated cool air which is bypassed the heat core 12 is changed, so that the temperature of the air which is blown inside the vehicle is adjusted.

Please replace the paragraph starting on page 5, line 25 and ending on page 6, line 1 with the following:

These doors 18 to 20 are rotated by an electric motor type actuator (not shown) through ~~a rink~~ a link mechanism (not shown). A blowing mode is arbitrarily set up by combining an opening and closing condition of each blower 15 to 17.

Please replace the paragraph on page 6, lines 12-15 with the following:

The control unit 40 is provided with a power source circuit of 5V 41, a circuit for protecting an internal power source 42, a first LIN input circuit 43, a second LIN output circuit 44, a communication ID input setup circuit 80, and a LIN communication processing circuit 45.

Please replace the paragraph starting on page 7, line 22 and ending on page 8, line 8 with the following:

The control unit 40 is also provided with an over-current detection circuit 53, an over-voltage detection circuit 54, and an over-temperature detection circuit 55. The over-current detection circuit 53 generates an over-current detection output when the current supplied to the electric motor 30 through the H bridge circuit 51 exceeds a predetermined acceptable value. The over-voltage detection ~~circuit 53~~ circuit 54 generates an over-current detection output when the voltage (voltage of power source of battery +B) applied to the electric motor ~~30e exceeds~~ 30 exceeds a predetermined acceptable value. The over-temperature detection circuit 55 observes a temperature of the electric motor 30 based on a detected output of a temperature detection element (not shown) such as a thermistor installed in the electric motor 30, and generates an over-temperature detection output when a temperature of the electric motor 30 exceeds a predetermined acceptable temperature.

Please replace the paragraphs on page 9, lines 5-18 with the following:

While the driving of the electric motor 30 is stopped, the actuator driving output control circuit 50 outputs a driving pulse to the transistors Tr3 and Tr4 such that the transistor Tr3 is turned on, and the transistor Tr4 is turned on. In FIG. 5, a reference ~~numeral T~~ numeral "t" denotes a zone that the driving pulse is input in the transistors Tr3 and Tr4.

As shown in FIG. 5, when the electric motor 30 is driven in the ~~normal~~ forward direction, a driving pulse P1 is output from a driving signal output terminal Q1 to the transistor Tr1, and the transistors Tr4 and Tr3 are turned off once. Next, PWM signal is output from a driving signal output terminal Q4 to the transistor Tr4. The PWM signal is controlled such that a duty ratio of the PWM signal is increased by 8% per second during the time ta from 0% to 100% adopting a targeted value of rotation frequency as 100%.